

ABSTRACT OF THE DISCLOSURE:

A dual feedback control system maintains the temperature of an IC-chip near a set-point while the IC-chip dissipates a varying amount of electrical power. The first feedback circuit sends electrical power to an electric heater with a variable magnitude that compensates for changes in the IC-chip power. The second feedback circuit passes a liquid refrigerant to an evaporator, which is connected to the heater, with a variable flow rate that reduces electrical power usage in the heater over that which occurs if the flow rate is fixed.